

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

IDENIX PHARMACEUTICALS LLC and
UNIVERSITA DEGLI STUDI DI
CAGLIARI,

Plaintiffs,

v.

GILEAD SCIENCES, INC.,

Defendant.

C.A. No. 14-846-LPS

FINAL JURY INSTRUCTIONS

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1. GENERAL INSTRUCTIONS

1.1 INTRODUCTION

Members of the jury, now it is time for me to instruct you about the law that you must follow in deciding this case. Each of you has been provided a copy of these instructions. You may read along as I deliver them if you prefer.

I will start by explaining your duties and the general rules that apply in every civil case. Then I will explain some rules that you must use in evaluating particular testimony and evidence.

Then I will explain the positions of the parties and the law you will apply in this case. And last, I will explain the rules that you must follow during your deliberations in the jury room, and the possible verdicts that you may return.

Please listen very carefully to everything I say.

You will have your written copy of these instructions with you in the jury room for your reference during your deliberations. You will also have a verdict form, which will list the questions that you must answer to decide this case.

1.2 JURORS' DUTIES

You have two main duties as jurors. The first is to decide what the facts are from the evidence that you saw and heard here in court. Deciding what the facts are is your job, not mine, and nothing that I have said or done during this trial was meant to influence your decision about the facts in any way. You are the sole judges of the facts.

Your second duty is to take the law that I give you, apply it to the facts, and decide under the appropriate burden of proof which party should prevail on any given issue. It is my job to instruct you about the law, and you are bound by the oath you took at the beginning of the trial to follow the instructions that I give you, even if you personally disagree with them. This includes the instructions that I gave you before and during the trial, and these instructions. All of the instructions are important, and you should consider them together as a whole.

Perform these duties fairly. Do not let any bias, sympathy, or prejudice you may feel toward one side or the other influence your decision in any way.

1.3 EVIDENCE DEFINED

You must make your decision based only on the evidence that you saw and heard here in court. Do not let rumors, suspicions or anything else that you may have seen or heard outside of court influence your decision in any way.

The evidence in this case includes only what the witnesses said while they were testifying under oath (including deposition transcript testimony that has been played by video or read to you), the exhibits that I allowed into evidence, and the stipulations to which the lawyers agreed.

Nothing else is evidence. The lawyers' statements and arguments are not evidence. Their questions and objections are not evidence. My legal rulings are not evidence. Any of my comments and questions are not evidence.

During the trial I may have not let you hear the answers to some of the questions that the lawyers asked. I also may have ruled that you could not see some of the exhibits that the lawyers wanted you to see. And, sometimes I may have ordered you to disregard things that you saw or heard, or that I struck from the record. You must completely ignore all of these things. Do not speculate about what a witness might have said or what an exhibit might have shown. These things are not evidence, and you are bound by your oath not to let them influence your decision in any way.

Make your decision based only on the evidence, as I have defined it here, and nothing else.

1.4 DIRECT AND CIRCUMSTANTIAL EVIDENCE

You may have heard the terms “direct evidence” and “circumstantial evidence.”

Direct evidence is simply evidence like the testimony of an eyewitness which, if you believe it, directly proves a fact. If a witness testified that he saw it raining outside, and you believed him, that would be direct evidence that it was raining.

Circumstantial evidence is simply a chain of circumstances that indirectly proves a fact. If someone walked into the courtroom wearing a raincoat covered with drops of water and carrying a wet umbrella, that would be circumstantial evidence from which you could conclude that it was raining.

It is your job to decide how much weight to give the direct and circumstantial evidence. The law makes no distinction between the weight that you should give to either one, nor does it say that one is any better evidence than the other. You should consider all the evidence, both direct and circumstantial, and give it whatever weight you believe it deserves.

1.5 CONSIDERATION OF EVIDENCE

You should use your common sense in weighing the evidence. Consider it in light of your everyday experience with people and events, and give it whatever weight you believe it deserves. If your experience tells you that certain evidence reasonably leads to a conclusion, you are free to reach that conclusion.

1.6 STATEMENTS OF COUNSEL

A further word about statements of counsel and arguments of counsel. The attorneys' statements and arguments are not evidence. Instead, their statements and arguments are intended to help you review the evidence presented. If you remember the evidence differently from the attorneys, you should rely on your own recollection.

1.7 CREDIBILITY OF WITNESSES

You are the sole judges of each witness's credibility. You may believe everything a witness says, or part of it, or none of it. You should consider each witness's means of knowledge; strength of memory; opportunity to observe; how reasonable or unreasonable the testimony is; whether it is consistent or inconsistent; whether it has been contradicted; the witness's biases, prejudices, or interests; the witnesses' manner or demeanor on the witness stand; and all circumstances that, according to the evidence, could affect the credibility of the testimony.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there is evidence tending to prove that the witness testified falsely about some important fact, or whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony he or she gave at the trial in person or by deposition testimony played by video or read to you. You have the right to distrust such witness's testimony and you may reject all or some of the testimony of that witness or give it such credibility as you may think it deserves.

You should remember that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth. People may tend to forget some things or remember other things inaccurately. If a witness has made a misstatement, you must consider whether it was an innocent lapse of memory or an intentional falsehood, and that may depend upon whether it concerns an important fact or an unimportant detail.

1.8 NUMBER OF WITNESSES

One more point about the witnesses. Sometimes jurors wonder if the number of witnesses who testified makes any difference.

Do not make any decisions based only on the number of witnesses who testified. What is more important is how believable the witnesses were, and how much weight you think their testimony deserves. Concentrate on that, not the numbers.

1.9 EXPERT WITNESSES

Expert testimony is testimony from a person who has a special skill or knowledge in some science, profession or business. This skill or knowledge is not common to the average person but has been acquired by the expert through special study or experience.

In weighing expert testimony, you may consider the expert's qualifications, the reasons for the expert's opinions and the reliability of the information supporting the expert's opinions, as well as the factors I have previously mentioned for weighing testimony of any other witness. Expert testimony should receive whatever weight and credit you think appropriate, given all the other evidence in the case. You are free to accept or reject the testimony of experts, just as with any other witness.

1.10 DEPOSITION TESTIMONY

During the trial, certain testimony was presented to you by the reading of a deposition transcript or the playing of video excerpts from a deposition. If played by video, the deposition testimony may have been edited or cut to exclude irrelevant testimony. You should not attribute any significance to the fact that deposition videos may appear to have been edited.

Deposition testimony is entitled to the same consideration you would give it had the witness testified in person here in the courtroom.

1.11 RULE 30(b)(6) DEPOSITION TESTIMONY

In this trial, there were certain witnesses identified as “Rule 30(b)(6) witnesses” for the parties. These Rule 30(b)(6) witnesses were designated to speak on certain topics on behalf of the entities which designated them as Rule 30(b)(6) witnesses. These witnesses include Dr. Michael Otto (designated by Gilead), Joseph Duffy (designated by Merck), and James Meyers (designated by Gilead). Rule 30(b)(6) witnesses are required to testify about information known or reasonably available to the designating entity related to those particular topics. For answers within the designated topics, the entity is bound by the answers provided by its Rule 30(b)(6) witness.

1.12 DEMONSTRATIVE EXHIBITS

During the course of the trial, you have seen many exhibits. Many of these exhibits were admitted as evidence. Some of these exhibits constitute charts and summaries. You may use these charts and summaries as evidence, even though the underlying documents and records are not here. You should give them only such weight as you think they deserve. You will have these admitted exhibits in the jury room for your deliberations.

The remainder of the exhibits (including other charts and animations) were offered to help illustrate the testimony of the various witnesses. These illustrative exhibits, called “demonstrative exhibits,” have not been admitted, are not evidence, and should not be considered as evidence. Rather, it is the underlying testimony of the witness that you heard when you saw the demonstrative exhibits that is the evidence in this case.

1.13 BURDENS OF PROOF

In any legal action, facts must be proven by a required weight of the evidence, known as the “burden of proof.” In a patent case such as this one, there are two different burdens of proof that you will apply. The first is called “preponderance of the evidence.” The second is called “clear and convincing evidence.”

Infringement of the ‘597 patent is not an issue you are deciding in this case and Idenix is not required to prove infringement at this trial. Instead, you are to assume that Gilead infringes the ‘597 patent. You must decide whether Idenix has proven that Gilead’s infringement of any valid claim of the ‘597 patent was willful by what is called a preponderance of the evidence. That means Idenix must produce evidence that, considered in the light of all the facts, leads you to believe that what Idenix alleges is more likely true than not true. To put it differently, if you were to put the evidence of Idenix and Gilead concerning willful infringement on opposite sides of a scale, the evidence supporting Idenix’s allegations would have to make the scale tip somewhat toward Idenix’s side for you to issue a verdict in favor of Idenix on the issue of willful infringement. If the scale should remain equally balanced or tip in favor of Gilead, your verdict must be for Gilead on the issue of willful infringement.

Gilead also alleges that the asserted claims of the ‘597 patent are invalid. A patent is presumed to be valid under the U.S. patent laws. Accordingly, Gilead has the burden of proving by clear and convincing evidence that each asserted claim is invalid. Clear and convincing evidence is evidence that produces an abiding conviction that the truth of a factual contention is highly probable. Proof by clear and convincing evidence is thus a higher burden than proof by a preponderance of the evidence.

Those of you familiar with criminal cases will have heard of “proof beyond a reasonable doubt.” That burden is higher than those that apply in this case, and it does not apply in a civil

case like this one. Therefore, you should put it out of your mind in considering whether or not either party has met its burden of proof.

Idenix must also prove by a preponderance of the evidence the amount of damages that is adequate to compensate Idenix for Gilead's infringement. I will give you more detailed instructions on damages later.

1.14 USE OF NOTES

You may use notes taken during trial to assist your memory. However, as I instructed you at the beginning of the case, you should use caution in consulting your notes. There is generally a tendency I think to attach undue importance to matters which one has written down. Some testimony which is considered unimportant at the time presented, and thus not written down, takes on greater importance later in the trial in light of all the evidence presented. Therefore, your notes are only a tool to aid your own individual memory, and you should not compare notes with other jurors in determining the content of any testimony or in evaluating the importance of any evidence. Your notes are not evidence, and are by no means a complete outline of the proceedings or a list of the highlights of the trial.

Above all, your memory should be the greatest asset when it comes time to deliberate and render a decision in this case.

2. THE PARTIES AND THEIR CONTENTIONS

2.1 THE PARTIES

I will now review for you the parties in this action, and the positions of the parties that you will have to consider in reaching your verdict.

As I previously told you, the plaintiffs in this case are Idenix Pharmaceuticals LLC and Universita Degli Studi di Cagliari. I will refer to the plaintiffs collectively as “Idenix.” The defendant in this case is Gilead Sciences Inc., which I will refer to as “Gilead.”

2.2 PLAINTIFFS' CONTENTIONS

The Idenix patent in this case is United States Patent No. 7,608,597, often referred to by the lawyers and witnesses as the '597 patent. The patent has also been referred to as the "asserted patent" or the "patent-in-suit." The asserted claims are Claims 1, 2, 4-7, 9-10, 16, 19, 23 and 28-31 of the '597 patent. The inventors of the '597 patent are Dr. Jean-Pierre Sommadossi and Dr. Paolo La Colla. Dr. Sommadossi assigned his patent rights to Idenix, and Dr. La Colla assigned his rights to the University.

You are to assume that Gilead infringes the '597 patent. Idenix is not required to prove infringement. Idenix alleges that Gilead's infringement of Claims 1, 2, 4-7, 9-10, 16, 19, 23 and 28-31 of the '597 patent has been and continues to be willful. Idenix also contends that Gilead owes Idenix damages to compensate for Gilead's infringement in the form of a reasonable royalty.

I will explain further each of these contentions in a few moments.

2.3 DEFENDANT'S CONTENTIONS

Gilead contends that the asserted claims of the '597 patent are invalid. Gilead also denies that its conduct is willful.

I will explain further these contentions in a few moments.

2.4 SUMMARY OF THE PATENT ISSUES

I will now summarize the patent issues that you must decide and for which I will provide instructions to guide your deliberations.

Infringement of the '597 patent is not an issue you are deciding in this case. Instead, you are to assume that Gilead infringes the '597 patent under the Court's claim construction.

Here are the issues you must decide:

1. Whether Idenix has proven by a preponderance of the evidence that Gilead's assumed infringement has been and is willful.
2. Whether Gilead has proven by clear and convincing evidence that one or more of the asserted claims of the '597 patent are invalid due to lack of written description, lack of enablement, or anticipation or obviousness.
3. If you do not find each and every one of the asserted claims invalid by clear and convincing evidence, then you must determine the amount of money damages to be awarded to Idenix. Idenix has the burden to establish the amount of its damages by a preponderance of the evidence.

I will provide more detailed instructions on each of the issues you must decide throughout elsewhere in these jury instructions.

3. PATENT LAWS

At the beginning of the trial, I gave you some general information about patents and the patent system and a brief overview of the patent laws relevant to this case. I will now give you more detailed instruction about the patent laws that specifically relate to this case.

4. THE PATENT CLAIMS

4.1 GENERALLY

Before you can decide many of the issues in this case, you will need to understand the role of patent “claims.”

The patent claims are the numbered paragraphs at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The claims are intended to define, in words, the boundaries of the invention that constitute the patent owner’s property rights. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent’s coverage. Each of the asserted claims must be considered individually.

Each claim of a patent effectively acts as if it were a separate patent, and each claim may cover more or less than another claim.

4.2 CONSTRUCTION OF THE CLAIMS

It is the Court's duty under the law to define what the patent claims mean. As I instructed you at the beginning of the case, I have made my determinations, and I will now instruct you on the meaning of claim terms. You must apply the meaning that I give in each patent claim to decide if the claim is invalid. You must accept my definitions of these words in the claims as being correct. You must ignore any different definitions used by the witnesses or the attorneys.

It may be helpful to refer to the copy of the '597 patent that you have been given as I discuss the claims at issue here. The claims of the patent are toward the end of the patent.

You are advised that the following definitions for the following terms must be applied:

Claim Term	Court's Construction
Method for the treatment of a Hepatitis C virus infection	Plain and ordinary meaning
Administering	Making available
Effective amount	An amount [of the claimed ribofuranosyl nucleoside] that is effective to treat HCV
Nucleoside	A compound comprising a base linked to a sugar
β -D-2'-methyl-ribofuranosyl nucleoside	A β -D- nucleoside that includes a five member sugar ring with a methyl group in the 2' up position and non-hydrogen substituents at the 2' down and 3' down positions

For any words in the claim for which I have not provided you with a definition, you should apply the plain and ordinary meaning to a person of ordinary skill in the art.

4.3 INDEPENDENT AND DEPENDENT CLAIMS

There are two different types of claims in the patent. The first type is called an “independent claim.” An independent claim does not refer to any other claim of the patent. An independent claim is read separately to determine its scope.

On the other hand, a “dependent claim” refers to and depends upon at least one other claim in the patent and thus incorporates whatever that other claim says. Accordingly, to determine what a dependent claim covers, you must read both the dependent claim and the claim or claims to which it refers. For example, claim 1 of the ’597 patent is an independent claim. You know this because it mentions no other claims. Accordingly, the words of claim 1 of the ’597 patent are read by themselves in order to determine what claim 1 covers. Claim 2 of the ’597 patent, on the other hand, is a dependent claim. You know this because it refers to independent claim 1. Accordingly, the words of claims 1 and 2 are read together in order to determine what claim 2 of the ’597 patent covers.

4.4 OPEN ENDED OR “COMPRISING” CLAIMS

The asserted claims all include the word “comprising.” The word “comprising” means “includes the following but not excluding others.” A claim that uses the word “comprising” is not limited to products or methods having only the elements that are recited in the claim, but also covers products and methods that have additional elements.

5. WILLFUL INFRINGEMENT

Idenix alleges that Gilead acted willfully. To prove willful infringement, Idenix must prove by a preponderance of the evidence that Gilead had knowledge of the '597 patent, but mere knowledge of the '597 patent is not sufficient.

Instead, to prove willful infringement, Idenix must also prove, by a preponderance of the evidence, that Gilead's conduct was reckless, willful, wanton, malicious, committed in bad faith, deliberate, consciously wrongful, flagrant, or—as it may be described—characteristic of a pirate. To determine whether Gilead acted willfully, consider all of the facts.

If you do decide that there was willful infringement, that decision should not affect any damage award you give in this case.

6. INVALIDITY

6.1 GENERALLY

The granting of a patent by the United States Patent and Trademark office carries with it the presumption that the patent is valid. The law presumes that the Patent and Trademark Office acted correctly in issuing the patent. Each of the asserted claims is presumed valid independently of the validity of each other claim. This presumption puts the burden on Gilead of proving invalidity by clear and convincing evidence on a claim-by-claim basis; that is, you must be left with an abiding conviction that the asserted claims of the '597 patent are invalid. This burden always remains with Gilead and never shifts to Idenix.

Even though the Patent Office examiner allowed the claims of a patent, you have the ultimate responsibility for deciding whether the claims of the patent are proven to be invalid.

For a patent to be valid, the subject matter claimed in the individual claims of the patent must be new, non-obvious, and the specification of the patent must be contain a sufficient written description of the claimed invention and must enable people to make the invention. A patent cannot take away from the right of anyone who wants to use what was already known or used by others, or what would have been obvious to those of skill in the art at the time the invention was made.

6.2 OTHER PATENTS

In this case, you heard testimony and saw evidence about patents other than Idenix's '597 patent that may cover Gilead's SOVALDI® and HARVONI® products. More than one patent by the same or different owners can cover a product or its use. Often, multiple patents cover the same product or its use. The fact that Gilead has patents that may cover its SOVALDI® and HARVONI® products or their use does not mean that any of the asserted claims of the '597 patent are invalid.

6.3 LEVEL OF ORDINARY SKILL

Patent invalidity defenses are evaluated from the perspective of a hypothetical “person of ordinary skill in the art.” The hypothetical person of ordinary skill in the art is presumed to be aware of all the prior art at the time of the invention.

You are to determine the level of ordinary skill in the art to which the claimed invention pertains at the time the claimed invention was made. In deciding what the level of ordinary skill in the relevant field is, you should consider all the evidence introduced at trial, including but not limited to: the levels of education and experience of other persons actively working in the field.

6.4 WRITTEN DESCRIPTION

Gilead contends that the asserted claims of the '597 patent are invalid for lack of an adequate written description. Gilead has the burden of proving lack of adequate written description for each asserted claim by clear and convincing evidence.

The patent law requires that a patent application contain an adequate written description of the invention to ensure that the inventor was in possession of the invention at the time the patent application was filed.

The written description requirement is satisfied if a person having ordinary skill reading the patent application would have recognized that the application describes the full scope of the claimed invention as it is finally claimed in the issued patent and that the inventor actually possessed that full scope by the filing date of the relevant application.

In the patent application process, the applicant may keep the originally filed claims, or expand, narrow or change the claims between the time the patent application is first filed and the time a patent is issued. An applicant may amend the claims or add new claims. The written description requirement ensures that the issued claims correspond to the scope of the written description that was provided in an application.

In deciding whether a specification satisfies this written description requirement, you must consider the description from the viewpoint of a person having ordinary skill in the field of technology of the patent when the application was filed. The written description requirement may be satisfied by any combination of words, structures, figures, diagrams, formulas, experiments, data, etc., contained in the patent application. These are often called "blaze marks." Blaze marks guide a reader through the specification's "forest" toward the claims. The full scope of a claim or any particular requirement in a claim need not be expressly disclosed in the original patent application if a person having ordinary skill in the field of technology of the

patent at the time of filing would have understood that the full scope or missing requirement is in the written description in the patent application.

6.5 ENABLEMENT

Gilead contends that the asserted claims of the '597 patent are invalid because the specification lacked an enabling disclosure. Gilead has the burden of proving non-enablement for each asserted claim by clear and convincing evidence.

A patent specification must contain a sufficiently full and clear description of how to make and use the full scope of the claimed invention. This is known as the “enablement” requirement, and it is designed to prevent both inadequate disclosure of an invention and overbroad claiming that might otherwise attempt to cover more than was actually invented. The purpose of this requirement is to ensure that the public, in exchange for the patent rights given to the inventor, obtains from the inventor a sufficient disclosure of how to carry out the claimed invention.

In order to be enabling, the patent must permit persons having ordinary skill in the field of technology of the patent to make and use the full scope of the claimed invention at the time of original filing without having to conduct undue experimentation. Some amount of experimentation to make and use the invention is allowable.

In deciding whether a person having ordinary skill would have to experiment unduly in order to make and use the invention, you may consider several factors:

- (1) the quantity of experimentation necessary;
- (2) how routine any necessary experimentation is in the relevant field;
- (3) whether the patent discloses specific working examples of the claimed invention;
- (4) the amount of guidance presented in the patent;
- (5) the nature and predictability of the field;
- (6) the level of ordinary skill; and
- (7) the scope of the claimed invention.

No one of these factors is alone dispositive. Rather, you must make your decision as to whether the degree of experimentation required is undue based upon all of the evidence presented to you with regard to all of the factors above. You should weigh these factors and determine whether or not, in the context of this invention and the state of the art at the time of the relevant application, a person having ordinary skill would need to experiment unduly to make and use the full scope of the claimed invention.

6.6 GILEAD'S PRIOR INVENTION CONTENTIONS

A patent claim is invalid if the claimed invention is not new and nonobvious.

In this case, Gilead contends that claims of Idenix's '597 patent are invalid as not new and as not nonobvious. These defenses are sometimes called anticipation and obviousness.

Gilead has the burden of proving anticipation and obviousness by clear and convincing evidence.

Gilead's contentions can be summarized as follows:

1. Gilead contends there was an alleged prior invention by Merck's Bohdan Wolanski or David Olsen in 1998 that invalidates claim 1 of the '597 patent due to anticipation.
2. Gilead contends there is anticipation of claims 1, 28, 30, and 31 of the '597 patent by an alleged prior invention by Merck's David Olsen in 1998 or 2000.
3. Gilead contends that even if none of these Merck related purported inventions anticipate any of the claims of the '597 patent, all of the asserted claims of the '597 patent are invalid as obvious due to the combination of (a) either the Merck work described above, with (b) Merck's 2001 '313 patent application, which resulted in Merck's '499 patent, and/or (c) the general knowledge of a person of skill in the art at the pertinent time.

I will provide instructions to guide your consideration of each of these contentions further below.

6.7 ANTICIPATION – PRIOR INVENTION

Gilead contends that certain claims of the '597 patent are invalid because the invention defined in the claims was invented by another person, either Bohdan Wolanski or David Olsen in 1998 or David Olsen in 2000, before Dr. Sommadossi and Dr. La Colla did so.

If Merck made or invented the subject matter covered by those claims of the '597 patent before Idenix did, then these claims were “anticipated” by the other invention and are invalid. Gilead must prove anticipation by clear and convincing evidence.

Only a person may be an inventor. A corporation cannot be an inventor.

An invention requires conception and reduction to practice. It also requires that there be no abandonment, suppression, or concealment.

Conception occurs when the inventor has a specific, settled idea; a particular solution to the problem at hand. The date of conception is the date the inventor first appreciated the fact of what he or she made.

Reduction to practice occurs either as of the filing of a patent application that adequately enables and describes the claimed invention (which is a “constructive” reduction to practice) or when the invention was actually made and was shown to work for its intended purpose (“actual” reduction to practice).

An invention loses its status as an invention if it was abandoned, suppressed, or concealed. This occurs when an inventor unreasonably delays in making the invention publicly known. Mere delay is not sufficient to establish suppression or concealment.

If Person A conceived of the claimed invention first, but reduced it to practice second (that is, after Person B), then Person A is the inventor permitted to obtain a valid patent only if Person A (1) began to reduce the claimed invention to practice before Person B conceived of it

and (2) continued to work with reasonable diligence to reduce it to practice from a time just before Person B's conception.

Diligence means that the inventor worked reasonably continuously on reducing the invention to practice. Interruptions caused by the everyday problems and obligations of the inventor or others working with him or her do not prevent a finding of reasonable diligence.

In this case, Idenix's earliest reduction to practice date is the same as the date you determine to be the priority date to be for the '597 patent.

6.8 OBVIOUSNESS - GENERALLY

Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable, an invention must not have been obvious to a person of ordinary skill in the art at the time the invention was made.

Gilead contends that if all of the elements of the asserted claims of the '597 patent are not found in Dr. Wolanski's 1998 alleged invention or Dr. Olsen's alleged invention, then you should consider whether that work renders the claims obvious when considered with the general knowledge in the field at the time and/or Merck's '313 patent application, which issued as Merck's '499 patent. Gilead bears the burden of proving obviousness by clear and convincing evidence.

In order to be patentable, an invention must not have been obvious to a person of ordinary skill in the art at the time the invention was made. The issue is not whether the claimed invention would be obvious today to you, as a layperson, to me as a judge, or to a genius in the art, but whether it would have been obvious to one of ordinary skill in the art at the time it was made.

In determining obviousness or non-obviousness of the subject matter of each of the asserted claims, you should take the following steps:

1. Determine the scope and content of the prior art;
2. Identify the differences, if any, between each asserted claim and the prior art;
3. Determine the level of ordinary skill in the pertinent art at the time the invention of the patent was made; and
4. Consider objective factors of non-obviousness.

In addition, you may consider whether there was an apparent reason to combine or modify the prior art references in the fashion claimed by the patent at issue, but in doing so, you must guard against slipping into the use of hindsight.

I will explain each of these factors in more detail in a moment. Against this background, you will then decide whether the subject matter of each asserted claim would have been obvious or nonobvious to a person of ordinary skill in the pertinent art.

6.9 SCOPE AND CONTENT OF THE PRIOR ART

As I just instructed you, in deciding whether or not the claimed invention is obvious to one of ordinary skill in the art, you must first determine the scope and content of the prior art.

This means that you must determine what prior art is reasonably pertinent to the particular problem with which the inventor was faced. Prior art is reasonably pertinent if it is in the same field as the claimed invention or is from another field that a person of ordinary skill would look to in trying to solve the problem the named inventor was trying to solve. Prior art can include the following:

- Prior patents that issued before the critical date for a particular patent;

- Prior publications having a publication date before the critical date for a particular patent;

- U.S. Patents that have a filing date prior to the critical date for a particular patent;

- Anything in public use or on sale in the United States before the critical date for a particular patent;

- Anything that was publicly known or used by others in this country before the date of the invention of a particular patent;

- Any of Merck's work (as evidenced by testimony, documents, publications, or patents) that you have found was a prior invention or that you find to be indicative the level of ordinary skill in the art.

6.10 LEVEL OF ORDINARY SKILL IN THE ART

Next you are to determine the level of ordinary skill in the art to which the claimed inventions were made. I have already given you instructions on the “Level of Ordinary Skill” at Instruction 6.3. That same instruction applies here.

6.11 OBVIOUSNESS – OBJECTIVE CRITERIA

Lastly, in making a determination as to the obviousness or non-obviousness of the claimed inventions, you must consider the following objective criteria (sometimes called “secondary consideration”), which may shed light on the obviousness or not of the claimed invention:

1. Whether the invention was commercially successful as a result of the merits of the claimed invention;
2. Whether the invention satisfied a long-felt need;
3. Whether others had tried and failed to make the invention;
4. Whether others invented the invention at roughly the same time;
5. Whether others copied the invention;
6. Whether there were changes or related technologies or market needs contemporaneous with the invention;
7. Whether the invention achieved unexpected results;
8. Whether others in the field praised the invention;
9. Whether persons having ordinary skill in the art of the invention expressed surprise or disbelief regarding the invention;
10. Whether others sought or obtained rights to the patent from the patent holder; and
11. Whether the inventor proceeded contrary to accepted wisdom in the field.

There must be a connection (i.e., a nexus) between the evidence showing any of these factors and the claimed invention if this evidence is to be given weight by you in arriving at your conclusion on the obviousness issue.

7. PATENT DAMAGES

7.1 PATENT DAMAGES GENERALLY

I will now instruct you about the measure of damages. If you find that any claim of the '597 patent is not invalid, you must then determine the amount of money damages to be awarded to Idenix to compensate it for the infringement. If you find that all of the asserted claims are invalid, then Idenix is not entitled to any damages.

By instructing you on damages, I am not suggesting which party should win this case, on any issue.

The amount of damages you award must be adequate to compensate for Idenix the assumed infringement of its '597 patent. A damages award should put Idenix in approximately the same financial position that it would have been in had the infringement not occurred, but in no event may the damages award be less than a reasonable royalty. You should keep in mind that the damages you award are meant to compensate the patent holder and not to punish an infringer.

Idenix has the burden to persuade you of the amount of its damages by a preponderance of the evidence. You should award only those damages that Idenix more likely than not suffered. While Idenix is not entitled to damages that are remote or speculative, Idenix is not required to prove its damages with mathematical precision. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

Again, the fact that I am instructing you on damages does not mean that the Court believes that one party or the other should win this case. My instructions about damages are for your guidance in the event you find in favor of Idenix.

7.2 PATENT DAMAGES – REASONABLE ROYALTY

In this case, Idenix seeks a reasonable royalty based upon Gilead's sales of SOVALDI® and HARVONI®. A royalty is a payment made to a patent holder in exchange for the right to make, use, or sell the claimed invention. That right is called a "license." A reasonable royalty is the payment for the license that would have resulted from a hypothetical negotiation between the patent holder and the infringer taking place at the time when the infringing activity first began. In considering the nature of this negotiation, you must assume that the patent holder and the infringer would have acted reasonably and would have entered into a license agreement. You must also assume that both parties believed the patent was valid and infringed. Your role is to determine what the result of that negotiation would have been. The test for damages is what royalty would have resulted from the hypothetical negotiation and not simply what either party would have preferred.

Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation. Although evidence of the actual profits an alleged infringer made may be used to determine the anticipated profits at the time of the hypothetical negotiation, the royalty may not be limited or increased based on the actual profits the alleged infringer made.

7.3 PATENT DAMAGES – RUNNING ROYALTY OR LUMP SUM

A royalty can be calculated in several different ways and it is for you to determine which way is the most appropriate based on the evidence you have heard.

Idenix contends that you should calculate the reasonable royalty based on what is called a “running royalty.” To calculate a running royalty, you must determine what the “base” is. The base is the products on which the infringer is to pay, here that is SOVALDI® and HARVONI®. You must also determine the “rate.” The rate is the percentage Idenix and Gilead would have agreed Gilead would pay Idenix as a result of the hypothetical negotiation. You then need to multiply the revenue that Gilead obtained from that base by the “rate” or percentage that you find would have resulted from the hypothetical negotiation.

Gilead contends that (if you find any of the claims of the ’597 patent are not invalid), instead of a percentage royalty, you should decide that the appropriate royalty that would have resulted from a hypothetical negotiation is a one-time lump sum payment that Gilead would have paid at the time of the hypothetical negotiation for a license covering all sales of SOVALDI® and HARVONI®, both past and future. This differs from payment of a running royalty because, with a running royalty, the licensee pays based on the revenue of actual licensed products it sells. When a one-time lump sum is paid, the infringer pays a single price for a license covering both past and future infringing sales.

It is up to you, based on the evidence, to decide what type of royalty is appropriate in this case.

7.4 FACTORS FOR DETERMINING REASONABLE ROYALTY

In determining the reasonable royalty, you should consider all the facts known or available to the parties at the time the infringement began. Some of the kinds of factors that you may consider in making your determination are:

- 1) The royalties received by Idenix for the licensing of the '597 patent, proving or tending to prove an established royalty.
- 2) The rates paid by Gilead for the use of other patents comparable to the '597 patent.
- 3) The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
- 4) Idenix's established policy and marketing program to maintain its right to exclude others from using the patented invention by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that exclusivity.
- 5) The commercial relationship between Idenix and Gilead at the time of the hypothetical negotiation, such as whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
- 6) The effect of selling the patented product in promoting sales of other products of Gilead; the existing value of the invention to Idenix as a generator of sales of its non-patented items; and the extent of such derivative or convoyed sales.
- 7) The remaining life of the '597 patent and the term of the license.
- 8) The established profitability of the product made under the infringed '597 patent, its commercial success, and its current popularity.

- 9) The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results.
- 10) The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by Idenix at the time of the hypothetical negotiation; and the benefits to those who have used the invention.
- 11) The extent to which Gilead has made use of the invention; and any evidence probative of the value of that use.
- 12) The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
- 13) The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks or significant features or improvements added by Gilead.
- 14) The opinion testimony of qualified experts.
- 15) The amount that a licensor (such as Idenix) and a licensee (such as Gilead) would have agreed upon at the time the infringement began if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee who desired as a business proposition to obtain a license to manufacture and sell a particular product embodying the patented invention would have been willing pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty Gilead would have been willing to pay and Idenix would have been willing to accept, acting as normally prudent business people.

7.5 REASONABLE ROYALTY – TIMING

The relevant date for the hypothetical reasonable royalty negotiation is at the time infringement began. In this case, that date would be December 6, 2013, when Gilead received approval to begin selling SOVALDI®.

If you award a running royalty, as Idenix seeks, it will be for the period through August 2016. If you award a lump sum, as Gilead seeks, it will be for the entire life of the '597 patent.

7.6 DAMAGES – COMPARABLE LICENSES

When determining a reasonable royalty, you may consider evidence concerning the amounts that other parties have paid for rights to the patent in question, or for rights to similar technologies. A license agreement need not be perfectly comparable to a hypothetical license that would be negotiated between Idenix and Gilead in order for you to consider it. However, if you choose to rely upon evidence from any other license agreements, you must account for any differences between those licenses and the hypothetically negotiated license between Idenix and Gilead, in terms of the technologies and economic circumstances of the contracting parties, when you make your reasonable royalty determination.

8. DELIBERATION AND VERDICT

8.1 INTRODUCTION

I have concluded the part of my instructions explaining the rules for considering some of the testimony and evidence. Now let me finish up by explaining some things about your deliberations in the jury room and your possible verdicts.

Once you start deliberating, do not talk to the jury officer, or to me, or to anyone else except each other about the case. If you have any questions or messages, you must write them down on a piece of paper, sign them, and then give them to the jury officer. The officer will give them to me, and I will respond as soon as I can. I may have to talk to the lawyers about what you have asked, so it may take some time to get back to you. Any questions or messages normally should be sent through your foreperson, who by custom of this Court is Juror No. 1.

One more thing about messages. Do not ever write down or tell anyone how you stand on your votes. For example, do not write down or tell anyone that you are split 4-4, or 6-2, or whatever your vote happens to be. That should stay secret until you are finished.

8.2 UNANIMOUS VERDICT

Your verdict must represent the considered judgment of each juror. In order for you as a jury to return a verdict, it is necessary that each juror agree to the verdict. Your verdict must be unanimous.

It is your duty, as jurors, to consult with one another and to deliberate with a view towards reaching an agreement, if you can do so without violence to your individual judgment. Each of you must decide the case for yourself, but do so only after an impartial consideration of the evidence with your fellow jurors. In the course of your deliberations, do not hesitate to reexamine your own views and change your opinion, if you become convinced it is erroneous. But do not surrender your honest conviction as to the weight or effect of evidence solely because of the opinion of your fellow jurors, or for the purpose of returning a verdict. Remember at all times that you are not partisans. You are judges – judges of the facts. Your sole interest is to seek the truth from the evidence in the case.

A form of verdict has been prepared for you, and you have been provided a copy. I will review it with you in a moment. You will take this form to the jury room and when you have reached unanimous agreement as to your verdict, you will have your foreperson fill in, date and sign the form. You will then return to the courtroom and your foreperson will give your verdict to my deputy who will read aloud your verdict.

It is proper to add the caution that nothing said in these instructions and nothing in the form of the verdict is meant to suggest or convey in any way or manner any intimation as to what verdict I think you should find. What the verdict shall be is the sole and exclusive duty and responsibility of the jury.

8.3 DUTY TO DELIBERATE

Now that all the evidence is in and the arguments are completed, you are free to talk about the case in the jury room. In fact, it is your duty to talk with each other about the evidence, and to make every reasonable effort you can to reach unanimous agreement. Talk with each other, listen carefully and respectfully to each other's views and keep an open mind as you listen to what your fellow jurors have to say. Try your best to work out your differences. Do not hesitate to change your mind if you are convinced that other jurors are right and that your original position was wrong. But do not ever change your mind just because other jurors see things differently, or just to get the case over with. In the end, your vote must be exactly that – your own vote. It is important for you to reach unanimous agreement, but only if you can do so honestly and in good conscience.

No one will be allowed to hear your discussions in the jury room, and no record will be made of what you say. So you should all feel free to speak your minds.

Listen carefully to what the other jurors have to say, and then decide for yourself.

8.4 SOCIAL MEDIA

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any electronic device or media, such as the telephone, cell phone, smartphone, tablet, or computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website such as Facebook, MySpace, LinkedIn, YouTube, or Twitter, to communicate to anyone any information about this case or to conduct any research about this case, until after I accept your verdict.

In other words, you cannot talk to anyone on the phone, correspond with anyone, or electronically communicate with anyone about this case. You can only discuss the case in the jury room with your fellow jurors during deliberations.

8.5 COURT HAS NO OPINION

Let me finish by repeating something I said to you earlier. Nothing that I have said or done during this trial was meant to influence your decision in any way. You must decide the case yourselves based on the evidence presented.